Issue 25 | Dec 2009

Blender learning made easy

blender art MAGAZINE

Winter Wonderland

Tutorial - Christmas Ball

Tutorial - Making Santa

Making - Cyclone

Making of - Winter Scene

COVERART Little match girl -by Cristian Mihaescu (criss)

blender art MAGAZINE

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COVER ART
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Sandra Gilbert
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"but there is something mesmerizing about watching snow gently fall. The soft fluffy look as it piles up here and there. Then there... "

I'll be the first to admit that winter is not my favorite season, but there is something mesmerizing about watching snow gently fall. The soft fluffy look as it piles up here and there. Then there are the lovely shades of blue that seem to paint winter landscapes in enchanting hues of winter chill. The almost magical look of icicles hanging in uneven rows along rooftops.

But all that aside, this particular winter has been filled with some exciting activities on the Blender front. We have seen the release of Blender . 0 Alpha 0, an event that has the whole community buzzing in excitement of new discovery and learning. Project Durian is going full steam ahead and the updates on their blog are full of new discoveries and excitement as well.

Now if only it wasn't so cold and wet, it would be a perfect season...

But even though winter is entirely too cold, it is filled with a number of fun activities as well as some rather popular holidays. And we have a couple of great tutorials to add to your holiday cheer and preparations, as well as a beautiful winter scene that captures the magic of winter chill.

So grab a cup of hot cocoa and a candy cane or two and settle in for a good read.

sandra blenderart.org

So here is my current list of great Blender Educational Resources

Introduction

Due to the nature of the internet, websites come and go at a rather remarkable rate and all too often take our favorite tutorials with them. Every so often, I go through my bookmarks and make sure that my favorites are still there as well as any new ones that I might have discovered since I last checked. So here is my current list of great Blender Educational Resources.

If a tutorial or resource is not listed here, it doesn't mean that it has disappeared, these are just some of my latest favorites.

Get the latest documentation for Blender.

Blender Quick Start Guide

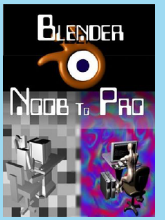
The Blender uick Start guide provides you with a basic overview of blender functionality on a single A page, ready to print. It is designed for beginners who don't want to read the whole documentation, and for experienced D artists who want to uickly learn blender.

Blender User Manual

Blender's user manual is maintained by a dedicated group of Blender users who work hard to keep it up to date with the fre uent new releases of Blender and it's features.

Download the Blender Wiki in PDF

Marco Ardito converted the blender wiki to pdf format for those who need/want offline access to the latest Blender documentation. He plans to update it monthly. At this point it is a single pdf file, over 1 00 pages, about MB.



Noob to Pro

This book is a series of tutorials arranged in a se uence to help the new user become a Blender expert. The tutorials become increasingly more difficult. As a result, intermediate users may uickly advance to whatever tutorial is most suitable for their knowledge and can continue along the se uence. Although there are many different learning paths a user could take, we've made a concerted effort to accommodate everyone.

Essential Blender

Essential Blender will get you working with modeling, materials and texturing, lighting, particle systems, several kinds of animation, and rendering. In addition, there are chapters on the new mesh sculpting tools and the brilliant compositor.

You can download a free pdf version

You can still purchase a printed hard copy at:

Blender E-shop

Amazon

Cool Educational Sites

Over the years a variety of great sites have been created to educate the CG/Blender masses. Here are a few to get you started.

CG Cookie

CG Cookie is an online educational resource for cg artists working with various popular applications. Currently, we are offering education on D Studio Max, Blender, Maya, Brush, and Cheetah D. Our educational materials are presented either in a written text format, or streaming video.

BlenderCookie

Blender Cookie is a site dedicated to supplying consistent, high uality, blender education materials produced by certified trainers from around the globe. By offering high resolution streaming videos, written education, developer interviews and featured resources, we aim to be the central hub for blender education.

Blender 3D Architect

Allan Brito provides valuable tips and tutorials about using Blender D for Architectural isualization.

blenderguru

He provides various tips and tutorials to get the most out of blender.

3d Synthesis

A wonderful collection of tutorials showing how to create rather unusual effects.

KatsBits

Making D content for games interactive media

Low poly D models, meshes, level editing and textures making

Hints, tips, tutorials resources for D modeling content creation

Blender Courses

All of the following courses are free.

Blender 3D: Product Rendering

ideo tutorials: Product Rendering with Blender utilizing traditional key light rigs, fake global illumination and external GI render engines. Also covered are materials and lamp definitions.

Blender 3D: Digital Modeling of Organic Surfaces

ideo tutorials: Digital Organic Product Modeling with Blender D using Polygon Subdivision Surface Modeling. Also covers steps to several modeling projects with tips and techni ues.

Blenducation

Blenducation seeks to provide a live, high uality learning experience for anyone interested D design and animation. They have a mix of both free and small fee classes.

Blender Basics- 3rd Edition

Classroom Tutorial Book: The manual addresses skills in a se uential order so skipping around may leave out important skill descriptions addressed in earlier chapters.

Blender 3D Design Course

The Blender D Design course is intended to offer students an introduction to the world of computer generated -D modeling and animation. As an introductory course, it provides a basic understanding of the skills and techni ues employed by -D designers in a wide range of applications. In this online course we will explore basic mesh modeling, applying textures and materials to -D objects, lighting, animation and rendering. This course should provide a good basis for further independent study in architectural, engineering and theatrical modeling and game design.

BlenderCourse.com

This projects goal is to develop free lessons and/or tutorials in PDF format for the D modeling tool Blender D. The idea is to write step-by-step courses which cover various Blender related topics in peoples native languages. All the BlenderCourses are written in the same style and layout in order to make consistent and recognisable ebooks.

ideo Tutorial Series

I really love these kind of series, the author takes one project from start to finish and covers all the techni ues and tools needed.

Blender Tutorial Series - Creation of ohnny Blender

A twenty-eight part series on the complete creation of a character in Blender, from a single polygon to a fully-rigged and textured character.

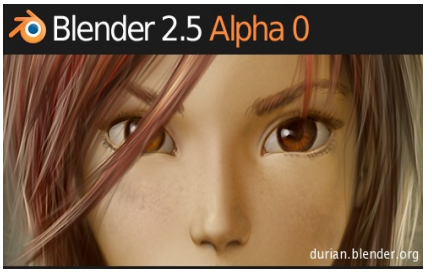
Model, , and Texture a Complete Manga Character in Blender

In this video long, intermediate to advanced level tutorial series, professional Blender artist, aran Shah, will walk you through the complete creation process of a ready to animate video game character. From modeling to s and texturing, to adding the final mesh topology for deformation.

Blender Tutorials etc. (Disneyland)

These videos mostly feature a D model of Disneyland, but the focus is on educating about Blender (and occasionally Photoshop), not educating about Disneyland

▶ Blender 2.5 Alpha 0



The release of Blender . alpha 0 has brought a lot of excitement and more than a few changes. As a first testing release, it already has uite a bit of familiar functionality added back in to the new code and interface. For those of you that haven't tested the pre-builds, there might be a little confusion as you try to find familiar features and options. Not to worry, new tutorials that ease you through the changes are already appearing, with more bound to be arriving as more users get comfortable with the new interface. And of course, don't forget to check the release logs to see the current features.

BlenderCookie:

Overview of Blender .

Modeling a set of Christmas Lights in Blender .

Box Modeling an Alien Character in Blender . Alpha 0

Blender Guru:

Where'd that button go?

Totally Blended:

Surviving Blender . Alpha

Observations and workarounds for the beta release.

BlenderNewbies:

Blender . .0 Tutorial: Changing the eystroke for the Add Menu from Shift-A to Spacebar

Ira Krakow: irakrakow's Channel:

Blender . Sneak Preview

Blender . 0 Alpha 0 Tools Menu

Blender . Camera Controls

Blender . Array Modifier

Blender . Ambient Occlusion

Blender . Pivot Points

Blender . ser Preferences

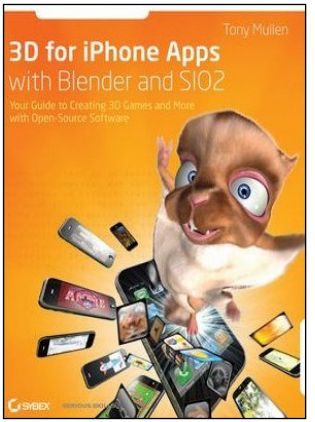
CGCookies.com

Blender . Training Series

Notice: All of the material within this training series is subject to change based on the development of Blender .

ust a few short weeks after Release Candidate 1 is published to the public. We will begin to release our training series one by one. You can expect to see a release of a new series every 1- weeks, but we will be working hard to make this happen sooner.

New book: 3D for iPhone Apps with Blender and SIO2



Tony Mullen announced his upcoming book on iPhone game development with Blender and the SIO game engine.

Tony Mullen wrote:

Hi Everybody,

I'm very pleased to announce that my latest book is available for pre-order at Amazon! The book is titled D for iPhone Apps with Blender and SIO : Your Guide to Creating D Games and More with Open-Source Software and you can pre-order it here.

As you can see from the title, the book deals with using Blender and the powerful SIO Game Engine to create D games and apps for the iPhone and iPod Touch. I can tell you first hand that it's a blast! The book does not assume any specific background knowledge, so in that sense it's intended for beginners . There's even an appendix giving a uick and dirty basic introduction to Blender itself. However, you should be aware that the material is challenging and the pace is pretty brisk, so any background you do have in Blender or graphics programming will be very helpful for you. It does assume some basic understanding of programming, so if you're new to programming in general, then you should be prepared to turn to supplemental resources to get you through any difficult patches.

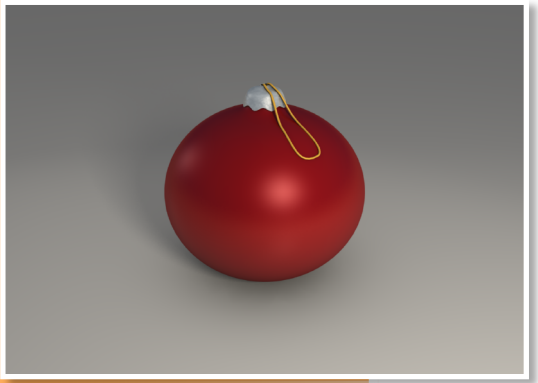
Blender 2.50 material library

Many users have wanted a material library to ship with Blender and it looks like Blender . 0 will contain one. A call for materials has been posted on the forums.

LetterRip writes:

A material library will be added to Blender for . , we would like to invite the community to participate in this by donating material settings. In order to facilitate this, please provide a link to a blend file with a single material in it.

Link - BlenderArtists thread



Christmas Ball

By John Bogren

Introduction

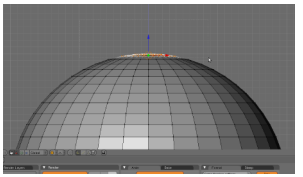
In this tutorial I will try to teach you how you can make a simple yet fairly good looking Christmas tree ball in Blender. I won't explain any super-advanced functions but yet some things that are good to know. I've chosen to split it up in three parts, the modelling, the render setup and the materials. If you choose to follow the tutorial through, your final result will hopefully look somewhat like the picture now left of the text.

Otherwise, you can skip to the part you want to learn more about. I've tried to write the tutorial on a very basic level so that even beginners can follow it through, though the last two parts might be a bit difficult.

First up: The Modelling

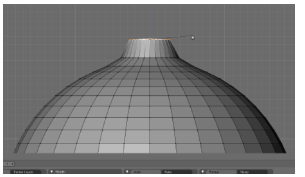
Begin with deleting the default cube and instead add a Sphere ***(Add›› Mesh ›› UVsphere***). Set both the rings and rows to the default and click O . After adding the Sphere press S . While you are in this scale-mode you can either drag with the mouse until you've got the size you want or you can write in your own number to set the exact number of times you want the object scaled.

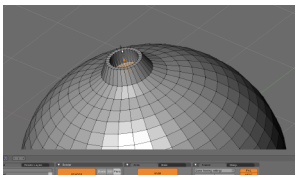
For this press and then Enter. Next look from the front-view (numpad 1) and enter edit-mode (tab) for the Sphere. se



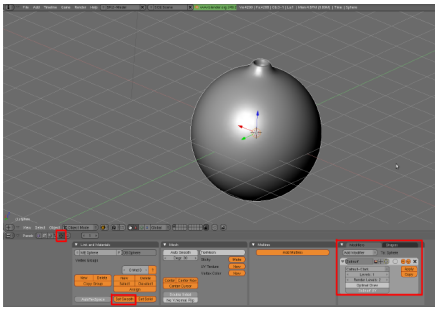
the box select tool (B), select the top three rings with it.

Then press G to move them all, also press to only move them on the z-axis and pull them up about 0.0 units (you can type this in as well). Press A to deselect all vertices and now select only the top two rings. These are to be moved along the z-axis ca 0. units and then scaled with S a factor of ca 1. units.



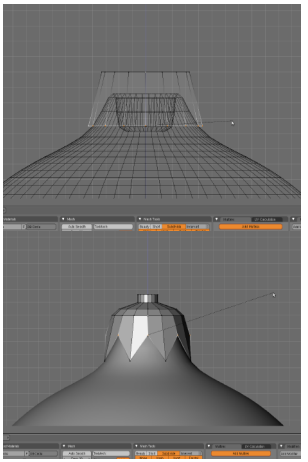


With the same vertices selected press E -> region to extrude the selection, right-click or press esc to get out of the drag-mode and instead scale it down about 0. . Extrude again and drag the extrusion down a bit. All that's left now for the main ball is to make it smooth. To do this, exit edit-mode (tab), then go to the editing panel (F) and with the Sphere selected look for the Modifiers tab, press Add Modifier and select Subsurf. Then in the Link and Materials tab press the Set Smooth button.

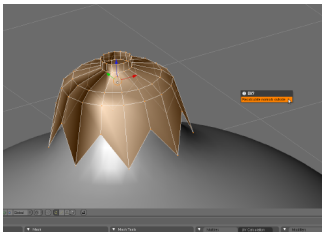


With the base done we're going to need a thing called a String holder in good English. Make sure that the cursor is still in the middle of the Sphere, else select it and press Shift S and select the Cursor -> Selection option. Then add a Add -> Mesh -> Circle, set the number of vertices to 1 and change the radius to 0. . This sets the start size of the Circle to that value, which means that we actually could have set the radius for the main Sphere to instead of scaling it after creating it.

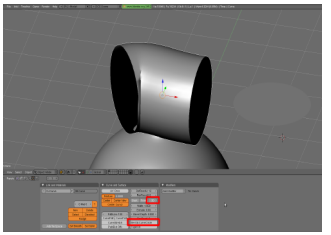
Anyhow, move the Circle up . units along the z-axis, go into edit-mode, extrude the whole Circle down about -0. along the z-axis and scale the extruded vertices up about a factor of 1. . Deselect all vertices and select only the top ring, extrude this up 0.0 and scale it down to 0. its size, then extrude up 0.0 again and scale down to 0. and finally extrude this up 0.0 yet again. Next, deselect all vertices and instead select every other vertex at the bottom ring and drag these up about 0. units and then scale these down to about 0. and it should look about as in the picture.



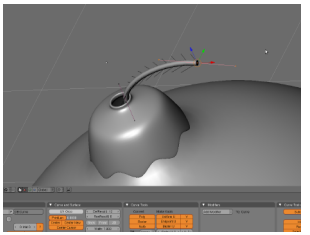
Let's set this piece smooth shall we? Exit edit-mode and go to the editing panel again and press Set Smooth. Now you should probably see some weird black lines on the model, this is caused by the fact that Blender doesn't know which way is the outside of the model and you will most likely bump into this problem a lot more if you haven't already. To fix this simply go back into edit-mode, press A until all vertices are selected and press Ctrl N and select Recalculate Normals Outside . Now we're going to give the String Holder some volume. To do this, select all vertices and press E -> Region , right-click or press esc and then press Alt S to shrink it inwards and write in a value of 0.01. Extrude and shrink again two times with the values of 0.0 and 0.01. Then do the same thing as with the Sphere and add a subsurf modifier and then set it smooth. Though this time we want a more smooth surface than the default so we increase the levels and render levels to and you'll see that we get a nice and smooth surface. It's good to know that there's a shortcut for the subsurf-modifier, if you press Ctrl any given number from 1- you will add a subsurf-modifier to the selected object with the given number's resolution.



Now for the string! You could make it of a Circle or tube that you extrude but that wouldn't look very smooth and also would take a lot of time. Instead we can use the fantastic Curves in Blender that's much more easy to handle and gives a far more good looking result. Firstly, place the cursor a little above the Sphere, add a Add -> Curve -> Bezier Curve then replace the cursor a little to the side and add a Add -> Curve -> Bezier Circle.

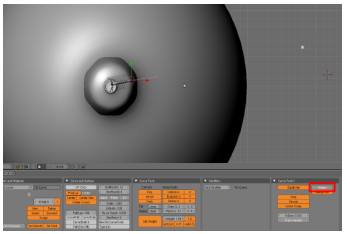


by John Bogren

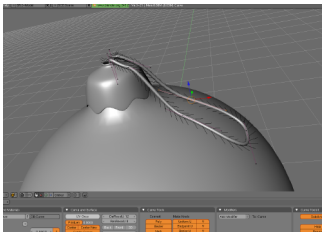


Select the Curve and go to the editing panel (F), in the Curve and Surface tab make sure the D button is pressed, this makes it able to model the Curve in D else it will only move in a D space, then in the text space after BevOb type in the name of the Bezier Circle, default CurveCircle , this will as you see make the Curve into a tube. The thickness of the tube is linked to the size of the Circle, so scale the Circle down to about 0.0 or whatever thickness you want for your string and then press M which brings up a panel of 0 buttons, press and then Enter. This puts the Circle on the second layer which you can get to if you simply press , get back by pressing 1 again.

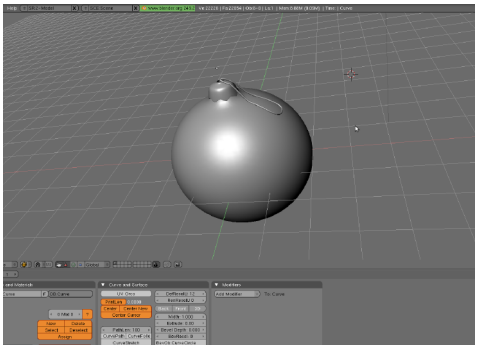
The modelling of the string is a bit tricky but with some tweaking it will hopefully look good for you in the end. Go into edit-mode for the Curve and select one of the -point lines by right-clicking on the middle point, with this you can grab and change the Curve, press G to move it and press R to rotate it until it sticks right up from the hole of the String holder. Then look from top-view (numpad) and in the editing panel go to the Curve Tools 1 tab and select Retopo . Retopo makes it so that whenever you move something from a view Blender will automatically drop the moved vertices down to the surface of the nearest object that's directly under the vertices based on the view. Hard to explain but you'll see how it works soon. Select the other end of the Curve and from top-view place it as in the picture and also rotate it so it's looking the right way. From here you can hold Ctrl down and left-click wherever you want the next section of the string to be.



Do this and add segments approximately at the places shown in the picture and now it's very important to deselect the Retopo button or else modelling will turn out very hard. The string will now look kind of weird but at least the segments nicely follow the surface of the Sphere. What you have to do now is to move the points at the end of each -point line until each segment is aimed the right way and no part of the string is below the surface of the Sphere. After you've got a nice string, select the segment created last and extrude this with E and tweak it until it's facing down into the hole the same way as the first segment.



If you've followed the steps correctly and figured the difficult parts out your completed model should look somewhat like this.



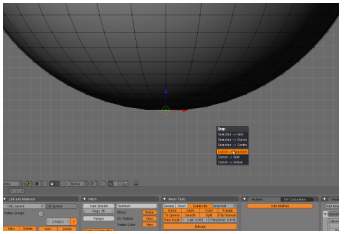
by John Bogren

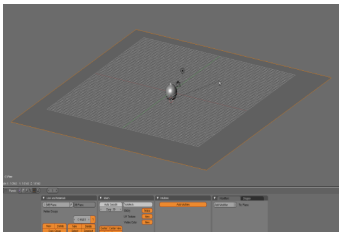
by John Bogren

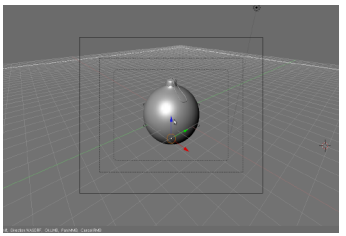
Secondly: The Render setup

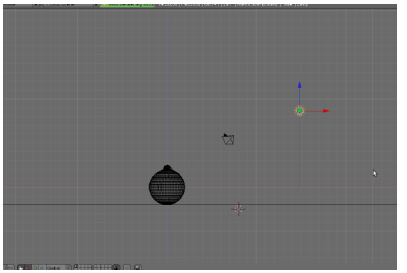
In this part I'll show how to set up a scene for the render to make it look good. I will talk about lighting, Approximate Ambient Occlusion and also a little positioning of the Camera.

Ok, to create a plane precisely at the bottom of the Christmas tree ball you can select the Sphere and go into edit-mode, select the vertex at the bottom and press Shift S -> Cursor -> Selection . Go out of edit-mode and add a Add -> Mesh -> Plane and scale it up about 0.0 or even more. Next select the camera and go into Cameraview (numpad 0), here you can press G to move it around (not very fast though so to move the Camera long distances it's recommended to do this outside of Cameraview) and you can also press Shift F to enter the so called Fly-mode with which you can look around, and also a lot of other funny stuff you'll probably notice after trying it out a bit. Anyway, move the Camera until it has the Ball in the center of the view and no edge of the plane is within the dotted line.

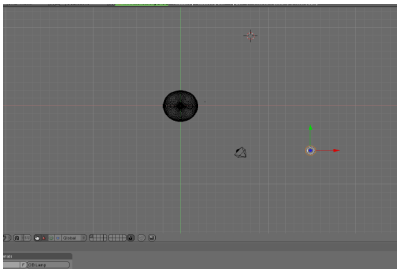




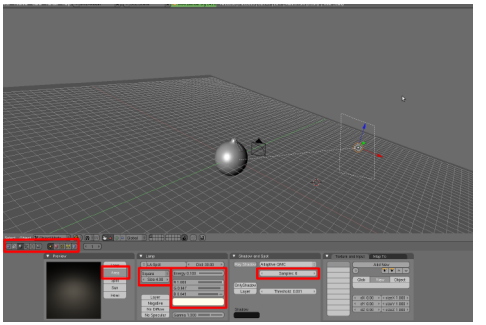




Next place the default Lamp on the position shown in the two pictures in relation to where your Camera is. Then press F until you get to the Lamp Buttons panel and do some adjustments as shown in the picture.



When you click on the Area button your Lamp will transform into a different form and will also get a dotted line coming out of it, it's important for this line to penetrate the Ball as shown in the picture so rotate it until it does.



The area lamp is different from the normal lamp since it is made for giving a really soft light and also with soft shadows in a given direction.

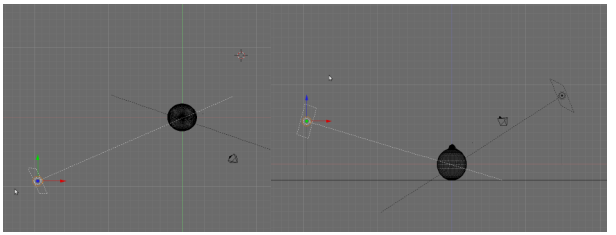
Size: This increases the size of the lightsource and therefore makes the shadows softer.

Energy: This changes the energy of the light. Area lamps have a stronger light than the normal lamp so this value often needs to be pretty low.

The **color sliders**: With no big surprise this changes the colour of the lamp, since no lamp is really 100 white it's more realistic to change it to, for example, this warm light yellow color.

Samples: The number of samples per pixel for the shadows. The higher the value the less grains there will be in the shadows and if set to 1 the area lamp will simply cast normal sharp shadows.

Duplicate the lamp and place it as in the two images, then make the adjustments in the Lamp Buttons panel shown below.

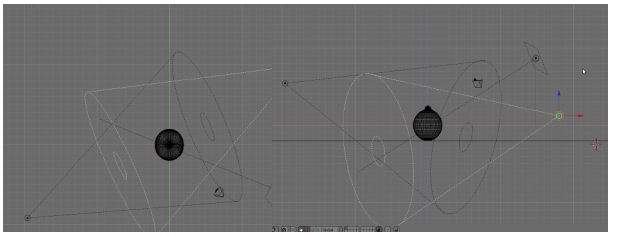


The spot lamp shows more exact what area it lights and is therefore better when lighting specific parts of a scene or if you want more controlled lighting.

SpotSi: Changes the size the spotlight affects.

SpotBl: Makes the edges of the spot lighted more sharp/blurry.

Then copy this light and yet again place it as shown in the picture. This light will be about the same though

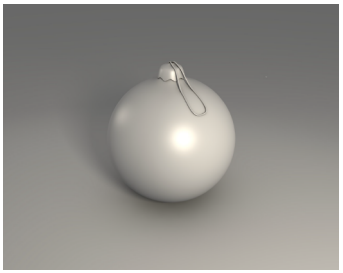


this time we'll select the No Specular button to remove this lights specular on the objects. This will now be our light setup but to get that really realistic look we'll use so called Approximate Ambient Occlusion which basically removes all the black spots in the

render by lighting up everything slightly. Press F again until you reach the World Buttons panel, here click on the Amb Occ tab and click on se Falloff and change the falloff to 0. . Falloff changes how far the darker areas around objects go, the higher the value, the shorter the dark spots. Also change the Raytrace to Approximate , this makes the processing a lot faster and also is without grains.

by John Bogren

Now if you press F1 your render should look something like the picture nearby. Nice huh?



Finally: The Materials

Add a material for the main Sphere called Christmas ball or something and make the following changes:

RayMir: Sets the amount of mirror reflection, set it to about 0. .

Fresnel: Makes the surfaces aligned with the Camera less reflective, set this to about 1. .

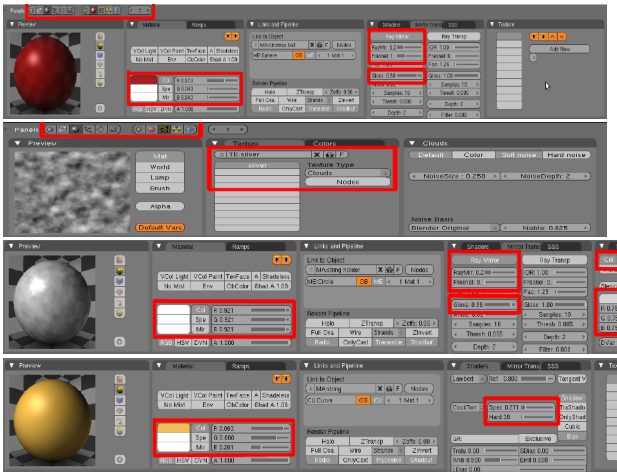
Gloss: Makes the reflections a little blurry instead of sharp, set it to about 0. .

For the String holder add a material called String holder or something and press F once to get to the texture panel and add a new texture and select the texture type called Clouds . Name this texture Silver . Press F again until you get back to the Material Buttons panel again and make the changes shown in the nearby picture. The col and nor makes the texture affect the colour and the normal to make it look a bit bumpy.

Last but not least, add a material for the String with the right values.

Spec: The higher the value, the shinier is the object.

Hard: The smaller the value, the more the specular is distributed on the object.



Well, that's it I guess. Hope it hasn't been too boring to follow. Now simply hit F1 and sleep for a while or something and when you wake up you'll find your beautiful Christmas tree ball waiting on the screen for you. :)

If you have any uestions, or maybe if you wonder how to do some of this in Blender . , you can e-mail me

John Bogren

I'm 17 years old, live in Sweden and have been working with blender on my spare-time for approximately 3-4 years.

Email: John_9998@blenderartist.org

by John Bogren

Making Santa

By Gord Goodwin

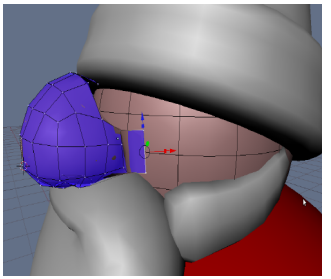
Introduction

Once again it is that magical time of year during which a jolly old man flies around the world in a sleigh pulled by reindeer to deliver toys to good girls and boys, and we call that old man Santa Clause. He is always the first thing to pop into my head when I think of winter and so I thought it was only fitting to make my own little Santa for this issue of BlenderArt Mag, and show you how you can too!

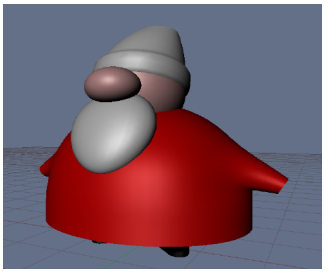
So let's get to it...

The first step is to design the character and decide how to construct it in D. For the purpose of this article I stuck to a design that was fairly simple, having no eyes and very few details at all. MyPaint is my favorite program for creating uick sketches and paintings like this. The general concept of the character was pretty well figured out before I had even begun to paint, but it was still helpful to get an image down so I could see it before attempting to model the character in D.

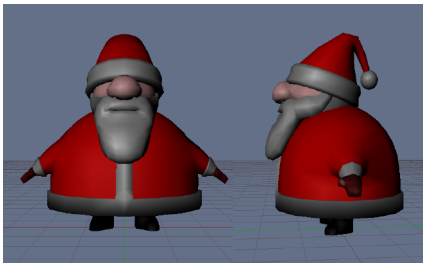
To begin the model, the shapes were blocked in using primitives (mostly spheres). I find that blocking in the basic forms with simple geometry before working into any details is essential to getting an appealing result. By starting rough and refining the whole character at once, getting lost in details or losing track of proportions is less likely to happen, making sure the shape of the character works well overall every step of the way.



Once the primitive geometry is in place, it is then necessary to re-design the topology of the surface to get better control over both the face count and edge flow. The Retopo tool can be used for this, but since I also want to refine the model during this step, I prefer to do this 'freehand' using the primitives as a guide.

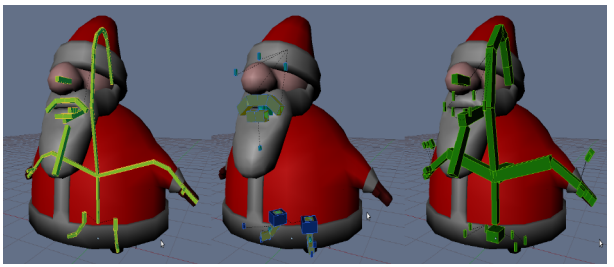


Once the model is complete, it is time to start rigging! sually when creating a character, I will begin rigging before the modeling has even been completed, but for this article I



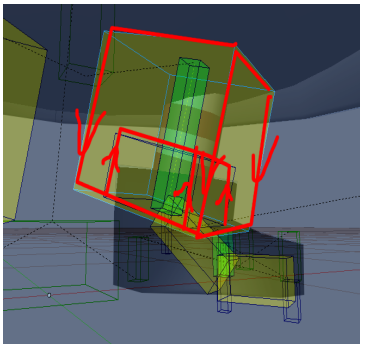
have decided to make it a separate step for clarity. It is beyond the scope of this article to explain the entire process I went through in rigging this character, but I will do my best to summarize clearly the parts that I feel may be confusing.

While designing a character rig, I find it useful to separate the bones into main working groups deformers, mechanisms, and controls. Deformers are the bones that will influence the mesh directly (with the 'deform' option enabled), Mechanisms are bones used to define the motions of the character and to serve as 'mediators' between the deformers and the controls, and the Controls are the bones which will be used by the animator for setting keys during animation.



Separating the bones by type not only helps keep things organized and less confusing to look at, it also makes trouble-shooting a rig a far less daunting task. Since the deform bones are constrained to the controls/mechanisms and not key-framed, they can be reconfigured even after animation has been created for the character (since the controls are the only bones with keys). This is a trick I learned from Nathan egdahl when I was first starting out with Blender.

Santa is indeed very round, and so the meshdeformer came in very handy. The meshdeformer is very useful for volume preservation, and is fairly simple to use as well. The trick to using it with an armature is to create a vertex group (usually called 'NoMDef') to blend the mesh influence between the armature and meshdeformer. You can see on Santa that the armature modifier is limited to the 'NoMDef' group, and the meshdeformer is limited to the inverse of the 'NoMDef' group. This group can be modified even after the meshdeformer has been bound to the mesh, to balance the influences as needed.

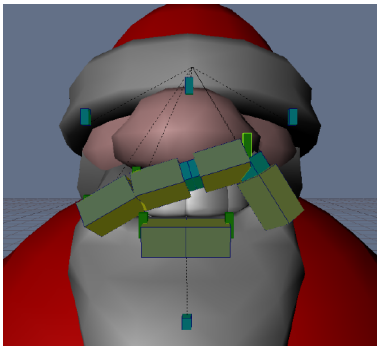


The legs and feet are based on a techni ue I've explained before in this tutorial on BlenderArtists. I've made a slight change to the design by adding an extra child bone on the leg, facing back up towards the pelvis. This bone follows the leg since it is a child, but does not scale with the I bone because I have enabled the little 's' button in the bone options. The purpose of this is to get the top of the boot to follow along with the angle of the leg, but not stretch as the leg does.

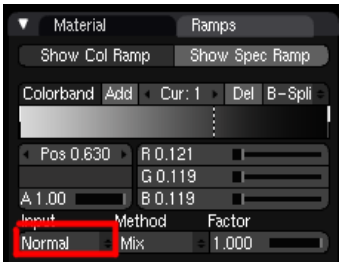
By Gord Goodwin

By Gord Goodwin

The lips are a simplified version of a techni ue I learned from analyzing the Big Buck Bunny Rig. Basically, a series of controls are laid out, and become the targets for stretch-to constraints on the lip bones. To control the orientation of the bones (for puckering) another set of bones also track the controls using I constraints and control the orientation of the first set of bones using rotation constraints. 'Pole targets' are added for the I constraints, which are then used to control the 'roll' or 'pucker' of the lips.



Finally, controls are added for the foot roll, fingers, and mouth positions using action constraints. All presets for the rig are contained in a single action named 'ARMAT RE'. The advantage of using the Action constraint is that the bones can be transformed in addition to the constraint. For example there are preset mouth positions for 'Oo', 'F/ ', and 'P/B/M' which behave just like shape keys but with the advantage that they can be adjusted or manually keyed at any time.



Once the rig is complete the fur and materials are configured, and last minute touch ups are made where needed. To create a nice falloff effect for the coat, to brighten the edges and make it look more like cloth, I added a ramp mapped to 'normal' (which is found in the first panel of the material window).

The particle systems used for the fluff and beard are practically default. The key setting is the 'rough' option found under the 'children' tab to the right of the particle panel to give it that nice fluffiness.

The Santa .blend file has been included under the Creative Commons Attribution-Share Alike . License for use in your own animations, or for taking him apart to learn some tricks for creating your own! If you do use him, please let me know because I'd love to see it!

For more character development resources in Blender check out my blog The Rigging Repository.

Gord Goodwin

The Making Of Cyclone

By Thomas Kole

Introduction

In the beginning of 00 , maybe end 00 I had an idea.

What if we made a first person shooter, in blender? What if we made a professional game, with good graphics in OpenGL, x-platform? I wanted to make it big, but not impossible to make. Today our team counts 1 people (all young, from 1 to 0 years old) and our first demo is coming out around Christmas. We did a great job so far, but we have a long way to go.

In this article I, Thomas ole, team leader of the Cyclon project, will give you a tour through the process of Cyclon, how it began, all the way up to now. I will give you tips for starting and keeping up an big game project with multiple team members spread all over the world.

So, how did I actually start the game. Well, it all started with an idea. ust an idea. I remember that I was in my bed, and I was thinking about a game. I've never been a gamer. Never really played any shooter in my life. So I had to think about everything from scratch. I saw a tropical island in my mind.

I wanted to do something original. ombies aren't original these days. I can tell you dozens of games where you have to (re) kill zombies. But what about chip-zombies? Humans with a chip in their head. Controlled by it, after a failed experiment. I can't tell any game which has that! The main idea was born. It needed a name. Metal Storm was my first idea, but unfortunately that name is already taken by a weapon company. What about Tropical Storm ? Didn't sound that well. That's it. Cyclon. Sounds pretty sci-fi, yet tropical. Now the real work can begin.

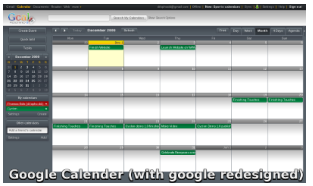
The real work began at the forum Blenderartists (http://blenderartists.org/). I just posted a thread. It was called CYCLON WIP Thread . Don't make it OMG BEST FPS E ER NEED HELP!!! That just won't do it. Sound professional. In the thread it told what I wanted. What I can do, the story line and the style, and what I needed other people to do, the programming, modeling and texturing.

Then, slowly but steadily the team members came. They made some models and showed me some of their work. Then suddenly David joined the team. He was a talented designer, and a very good organizer. He helped me a lot. I made sure I had everybody's (not more than or that day) instant messenger address, and we slowly started planning the game and creating models for it. Then I suddenly lost all contact with our programmer. We needed a new one. At the moment we have . ust because our project looks professional and showed promising results.

So you might wonder I have a team, now what? If you have a big team, you need to manage things well. Make sure you have good contact with everyone. se Gtalk, MSN, Aim and other instant messengers. Of course you don't want to have all different application for all those different messengers. I se Pidgin. You can download it at www.pidgin.im. It supports nearly all messenger networks, an all in one application. That is the first step to a good project, communication.

By Thomas Kole

Dropbox Website


Google Calender (with google redesigned)

Now everyone needs all the files. We use dropbox (www.getdropbox.com). Dropbox is an x-platform file management program, which lets you synchronize files over different computers. You just have one folder with all your files. And everyone one your team has them too. You get the program plus gb of space for free, but for more space you will need to pay. The next step is to get everybody working. Make a 'todo' file which contains who has to do what and when it needs to be done. Make a calendar. We used gCal. Because it's fast, online and everyone can see it, if you invite them.

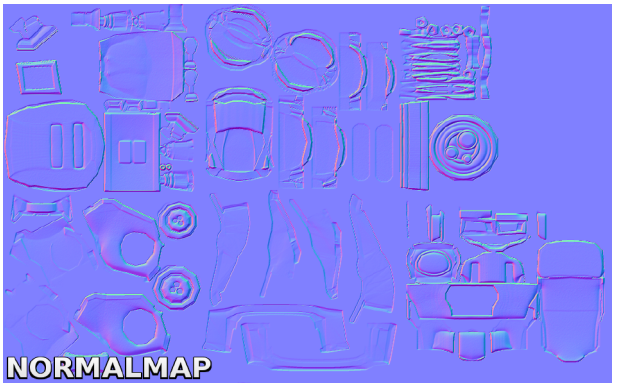
Lets get to the more technical part. What makes it feel immersive and fun to play, what makes it a good game? The first thing is: Don't worry about making things perfect, but you still need to be happy with. For example: You want to design a gun. You want to make it powerful, but if it is too powerful, and has no weakness to balance it out, it ruins the challenge of the game, and the game becomes boring.

Most first person shooters have shotguns, they are very powerful at close range and will kill nearly any enemy in just one shot, but at a distance your just wasting ammo. Of course this is true in real life, because of the spray of the pellets from the shotgun shell, the closer the target the more damage, because the pellets haven't spread out as much as they would at a larger distance. This is why shotguns are in every game featuring zombies and are great for killing them, because zombies have to be close to the player in order to cause damage. The player's success in the game should come rather from his decisions than what gun he is holding, that's why you will often see videos of people completing a game with only a pistol or a wrench. You can see they play very differently to what most people would, because they are deciding how to play to the strengths of that weapon and are avoiding its weaknesses.

Now that I've talked a little bit about game play, its time to mention graphics. Today's games look almost photo-realistic, with their HDR lighting, Parallax Occlusion Mapping, Depth of field, Subsurface Scattering, Soft Shadows, Realtime Refraction and fully destructible environments to name but a few features of them. If you want to make that too, you will need to use tricks to fake it. Game design if full of tricks.

One of these tricks is to display low-resolution models far away from you, and high-resolution models near you. This is called Level of Detail, or LOD for short. It allows you to show a lot more objects on screen and still have a playable frame rate instead of just having your objects disappear when you move too far from them. Allowing the player to feel more immersed in your game, because in real life things don't just disappear if you move away from them, but neither does it run at frames per second.

The next trick is normalmaping and is used by many games and can be done properly in blender. These normalmaps are textures that give the illusion that you are looking at a high-resolution model, but you are actually looking at a low-resolution model, the texture contains information about how light reacts with the model.



Therefore giving the illusion details being modeled on the object when they actually are just in a texture. Most of our models in Cyclon have normal maps and Specular Maps. Specular Maps or just Spec Maps, are gray-scale textures that define the strength of Specular Highlights on objects, this is essentially your Spec slider on the material tab, but because it is a texture it lets you have different specular values in different places on your model. This is very useful for metal because it allows the scratches that we have painted in the texture to react much more with the light like it would in real life ■

By Thomas Kole

Winter Scene

By Benjamin Bailey (Bapor)

Introduction

Hello, my name is Benjamin Bailey, and I will be taking you through the process I took to create my Winter Pine image, made in Blender . b. I will be showing the overall process of creating this wintry scene, as well as a more detailed view on the creation of a pine tree, using curves and particles. I hope you enjoy this presentation!

This project started out as a simple little snow scene, complete with a uaint cabin, rolling snow-covered hill, cute spruce trees lining the horizon, and a cold moon lighting the night sky. But that all changed as I neared the deadline for writing this making-of article, when I realized I was going to have to cut some corners in order to get a good result done on time. So here's how I did it, from start to finish.

Note: In an attempt to keep this article in a linear order, I will be showing the process I took during the making of A uiet Night in the same order as it happened, which may not the most logical order of operations in retrospect. In some cases I will delineate from the exact order of events for the sake of clarity. All in all, I hope this article proves to be an accurate case study.

Concept

While I'd highly suggest drawing some concept art before you delve into your project, I rarely do. This time around, however, I tried a new techni ue: blocking out the scene with simple objects. sually when I start out a project, I just jump into Blender, hit Tab for edit mode, and hack away at making an awesome model. After that I throw in some simple materials, maybe a couple procedural textures, drop in a simple -point lighting setup, and hit render a few times, tweaking it till it looks cool. This time, however, I went a little further.

Blocking Out The Scene

Since I don't work on entire scenes much, mostly just individual objects, I found it a big (and rewarding) challenge to create this winter scene. Starting with a basic cube primitive, I sized it along the Y axis to give it a little depth to resemble a house. For the hill I just added a plane, subdivided it a few times, and put in some topographical detail by pulling vertices along the axis with the Proportional Edit Falloff. Next I put in a cylinder for the trees, and extruded it along the axis in Edit Mode, sizing as I went in order to vaguely resemble a spruce tree, finishing off with a Merge at the tip of the tree. I used Alt D ey to duplicate the tree with shared mesh data, so I could easily tweak one tree and affect all 10 tree objects at once. After placing these cute little cartoony trees about on the hill, I added in a moon, which proved to be the easiest object of the entire project. I will give more details on each object of the scene as we proceed.

Next, I just added basic materials to each object, adding to the overall composition concept, as well as adding a basic World color with Blend, to simulate the horizon/zenith color gradation. I also added the lights at this stage, including a white area light behind the moon, a basic blue lamp for overall lighting, and a hot yellow lamp for inside the house, to give the rustic dwelling a warming glow.

By Benjamin Bailey (Banor)

With the scene fully blocked out with our altered primitives, it was now time to add in the little details. :)

The House

I made the simple house shell by adding a basic cube, which I grabbed one side of and stretched along the Y axis, locking it to the grid floor by holding down Ctrl as I moved the selection.

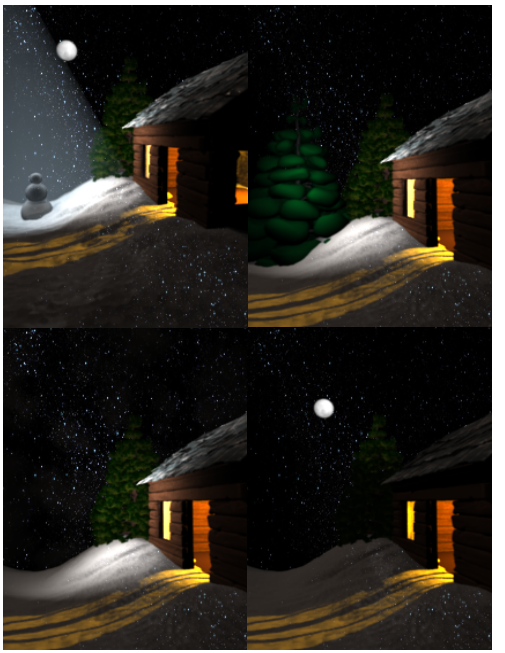
Wooden Siding

Duplicating the basic house mesh and keeping it in the exact same place, I went into edit mode and extruded it by Region along the and Y axises. To do this, simply hit S ey to size and then Shift ey to negate the axis from being sized in the operation. Once this was done, I placed the D cursor at the base of the entire mesh, right along the 0 of the axis, and then hit the period key, to set the D cursor as the operation pivot. With this in place, I sized the whole extruded house down by till it resembled a thin band, to simulate the log siding of the house. Adding a Subdivision Surface modifier, I cut in a loop towards the center of the band (to sharpen the edge where it rested against the house base mesh.) Then I carefully selected one side of the s uare band and split it with the Y ey. After doing this with each side of the house, I filled in the now-faceless ends of the separate pieces by manually selecting the appropriate vertices and hitting the F ey to fill in the ends with faces, one by one.

Next I added an array modifier along the axis, to duplicate the wooden boards, to simulate wooden siding or a log house. Once this was done, I exited Edit Mode, selected the house base object, which is still a basic cube, and in Edit Mode I cut in a door and some window holes with Ctrl R. With this done, I moved back to the wood siding and cut in similar details, splitting the extra wood faces from the doorway and windows, and deleting them. Here I ran into a counter-intuitive issue, where I would either have to cut and fill in the ends on either side for all the siding pieces that had a doorway or window in them, or do it on one siding piece and duplicate it. I choose the latter choice, which was probably the faster method.

So I cut in the loops where the door and windows where, deleted the extra faces, filled in the empty ends of the wood siding, naming the pieces that were to be duplicated, duplicating them, and renaming them as necessary (changing the default naming system of name.001, name.00 , name.00 , to name1, name , name .)
After all that, I was ready to go onto the next step.

Note:
There's more that I did with the house, but I'll continue with that later in the article.



By Benjamin Bailey (Banor)

The Snow

As I stated before, I simply used the Proportional Edit Falloff tool in Edit Mode to grab some vertices and pull them up or push them down along the axis, to simulate a rolling hill. It was pretty easy, but the finished result turned out very, well, ugly. However, it looked good enough from the camera's angle, and that's all I cared about.

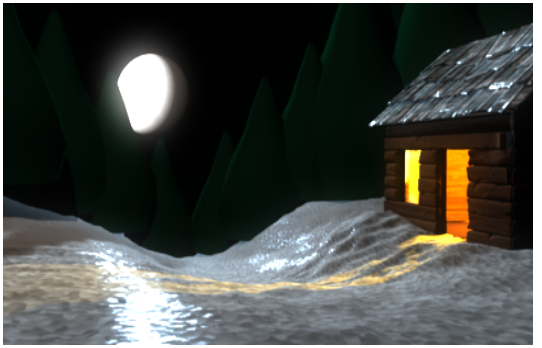
Snow Material

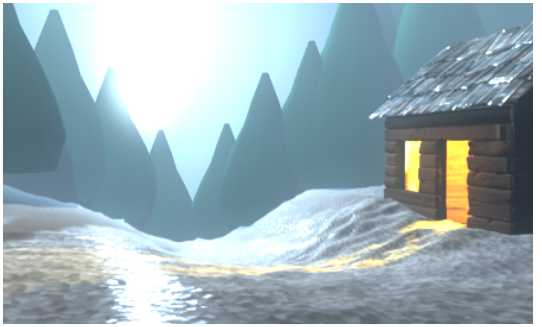
The snow material gave me some issues. Fortunately, I got it good enough by the end of the project. My issue? Well, I wanted the snow to have irregularities, such as bumps and rises, and yet I wanted it to be frosted, sleek, and sparkly - you know, like the frosted snow you see early in the morning, all shining and crusted on top, like a frozen glaze of frosting on a cinnamon roll. Yum. :) Actually, I had wanted to just do fluffy, normal snow, but it turned out the frosted way, so I went with it. That's what seems to work with me: if it turns out one way, a way that is different from how I had anticipated it, I go with it. Maybe not always, but often it turns out just fine - different, but good.

First I tried having two textures, the bumpy one and the frosted, sparkly one, both in the same material on the same snow object.

Well, I kept getting fudged up results with this - either one texture would work, or the other one would. It seemed the frosted texture overrode the bumpy one, both using Nor to give the material a dynamic feel. O , so that didn't work.

Next I tried duplicating the snow object, and placing the duplicate slightly above the original, giving the second, higher object a material with the frosted texture, adding transparency so you could see the bumpy-textured snow object underneath. Well, this didn't work either. Oh well.





Finally, I got smart and deleted the duplicated snow, along with removing the bumpy texture, instead making a procedural texture and applying it to a Displace Modifier. Yep, that's right, I subdivided the snow object some more so the displace modifier's texture would give the rather flat snow some humps and bumps, and viola! After a little tweaking with the strength of the modifier, my snow was now bumpy and shiny - with both a modifier and the frosted texture combined on the same snow object. Well, that worked. :)

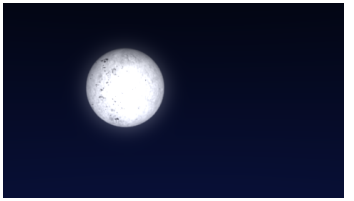
Later I slightly adjusted the snow's furthest edge (from the camera's viewpoint) with the Proportional Edit Falloff tool to fit the scene's new composition.

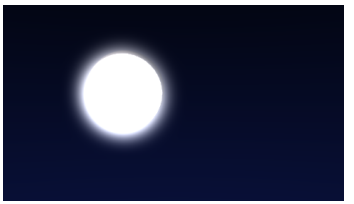
By Benjamin Bailey (Banor)

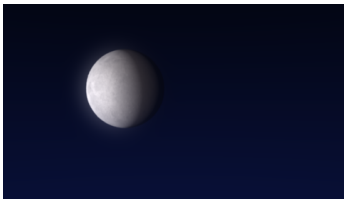
The Moon

The moon, as I said, was the simplest mesh object in the entire project. At least, that's what I thought, till I got the final rendering stages. But I'll get back to that issue later. :) For now, we'll concentrate on the ease and simplicity of initially setting the moon up.

First, I added a sphere, with the standard x setup, and set the shading to Smooth. Next, I looked online for NASA images (which have a lenient licensing) of the moon, and, to my great delight, found a website dedicated to offering planet textures, most of which are based off of NASA images. sing these two moon textures, one for the image, one for bump mapping with the Nor value, I created my moon.







I added one area light, pointing directly towards the moon and towards the scene - so it's right behind the moon, facing us, the camera. This provided ample lighting to the scene, as well as giving the moon an extra pizazz and glow.

More on the House

It was time to give the house some textures, right? Sheesh, this wasn't going to be as easy as I thought. So I looked online for a wood material made with procedural textures, and found just the tutorial I was looking for. Sadly, the finished texture really isn't that good, and above all, you couldn't tell what my texture was like from the outside very much. Besides, my house was supposed to look like a log cabin, (and turned into a wooden-slatted house,) and that type of texture doesn't work well with the outsides of logs. :)

Anyhow, I used a few sized empties (as the wood texture tutorial instructed) to stretch the procedural textures along the correct axis. The problem is, this only worked for half of the wooden slats - that meant that for the other half of the slat objects, I'd have to set up a different set of empties along with their uni ue material settings. What a pain. But I did it, complete with separating each layer of wood from it's right-angle partners, and keeping the parallel slat siding in the same object, allowing me to use two materials with their own textures and empties to create the wooden texture for my siding.

By this time I was ready to add some more detail to the house, pulling it away from the boring, rounded shape it had been stuck in up to this time. So, I went into Edit Mode and cut in some detail with Ctrl R, E ey for extruding, Alt S for shrinking/fattening, and Face Selection mode along with ey for the knife tool (Midpoints.) E uipped with all these tools, I hacked away the wood, trying to roughen it up. All I succeeded in doing was giving it some irregularity, however, and overall it still retained that smooth, sub-surfed toon look.

By Benjamin Bailey (Banor)

Man, that's really not what I was going for, but oh well, I'd keep with it. It was a style after all, even if it wasn't the style I was going for. (See Marcin Wodzynski's windmill to get an idea of the rugged look I was after.)

Well, it was about time I did something about a roof, isn't it? By this time I had give the house mesh a basic, slanted roof with deep overhangs. I had some issues with this roof, simply some issues with messed-up topology that caused me some frustration. But now it was time for some detail on the roof, right? You bet!

The Shingles

Surprisingly, this didn't take me all that long to do. Basically I added a Plane object, deleted the vertices, hit Retopo, and using Ctrl LMB, I added in some new, connected vertices on top of the roof, making a face with F ey and extruding (but unchecking Retopo first,) the whole plane slightly. I duplicated this strange, flat cube and placed it right next to it's twin, and then I sized the ends to resemble another very awkward, funky shingle. Repeating this process, I added variation to a row of simple, ugly shingles. Then I duplicated the entire row, moved it up the roof slope some, and went into side view to align and slightly overlay the shingles. I did this one last time, finishing off the top of the roof. Of course, to uickly add more variation to the duplicated rows, I mirrored the duplicated row along the axis, then manually tweaked various shingles, making some shorter, other's longer, and making sure to have the shingles hang slightly over the edge of the roof (on the side towards the camera.)

All the while I'm doing test renders, along each stage of this hazardous project. I noticed gaps in the shingles, showing the roof base (which is still part of the house.) So I fixed this problem by going back into Edit Mode and carefully shaping each shingle to fit snugly with each other, making a happy family of frosted steel shingles. :D Of course I added some textures to this new baby, which simulated, as I've already hinted, a frosted, snow-covered, metal roof.

Mr. Shadow Man

I had the idea that I wanted a long, slanting shadow coming from the house, right out from the doorway, which was casting a magnificent flood of light on the snow. So, I uickly box-modeled a simple, stringy-alien figure, to be my Shadow Man . Inspired by Tim Burton's work, I most appropriately saw the correlation between my project and his excellent The Nightmare Before Christmas, and so my character was also lanky, like ack, ing of the Pumpkin Patch. However, I soon found my idea wasn't going to work.

I tried a different angle, I tried a more intense light, I tried area light (ouch, that light was WAY too bright at first - nice, crisp, pixelated pure golden-yellow light. Yeah, that's real nice.) But it ended up that you can't really tell there is a shadow of a man on the ground - it just looks like long lines coming out from the doorway.

By Benjamin Bailey (Banor)

I even tried disabling the Displace Modifier, which definitely helped, but in the end I decided that the Displace Modifier was much more important for the overall composition, and just kept my silent, shadowy man hidden in the house doorway, casting his ubi uitous shadow, even though you can't really tell what the shadow is supposed to be.

The Trees

The trees at this time looked uite cute, simple, and toony. Oh well, why not leave them that way, right? Not good enough, I say!

Tracing the Branches with Curves

So, taking the trees from their basic, cylindrical shape, I go into the long process of making highly-detailed trees with the use of curves and particles. For the most part I followed Andrew Price's tutorial on How To Create Stunning Trees. Where I differentiated from his tutorial is in that I used a hair particle system instead of alpha images on planes. This seemed to work better for my project, as pine needles are either clustered in groups or shooting out in all directions around a twig, like in spruces. It was actually my sister's idea to use particles to solve my pine-needles problem - kudos to her!

So, using a background reference of a spruce tree, I traced the trunk of the tree using a D bezier curve.

Next, I arbitrarily traced some branches, about , coming out in a ring formation from the trunk. Adding some mild variations to each branch, I duplicated the ring of branches and moved them up the axis a little, to about where the next set of branches should be. Of course, I rotated the branches along the axis to add some variation, and repeated this process all the way up the tree. After that, I did some tweaking on the branches, especially for the top branches, which behaved rather awkwardly.

Adding Volume to the Branches

Now here's where I did the stupid part: now that I had all the D bezier curve branches in place in the same object, they were still just curves with no volume. So, I added volume, with Bevel Depth. But there was an issue - the curves were only half-pipes, half-spheres. Yuck! So to solve this, I unclicked the Front and Back buttons, which are right next to the D button in the Editing tab, under Curve and Surface. This made my curves very nicely shaped and full of volume. Not that stupid, right? Well, yes and no. The techni ue is fine for this situation, but the issue of stupidity was this: with all the branches in place and now with volume, I would have to manually go in and resize the tip and base handles of each bezier curve, which is what I did. Sigh, what a waste of time. I should have done this step then copied all the branches, tweaking and arranging them. Oh well.

So this is what I did next: I started grabbing curve ends and resizing them to a fine point with Alt S one at a time, handle by handle, and then gripping the base and shrinking those down to a reasonable size as well, finishing off the operation by selecting the entire independent curve and hitting W (specials key) and selecting Smooth Radius.

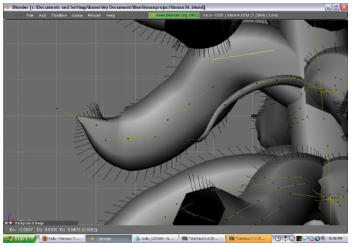
By Benjamin Bailey (Banor)

This smooths out the radius of the branch based on the start and finish points of the curve. Extremely handy little trick.

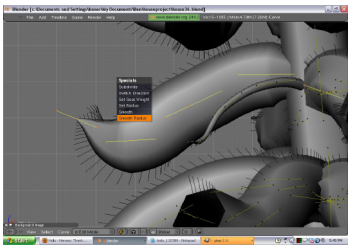
However, this was going too slow, so I uickly adopted the idea of selecting multiple tip ends and shrinking them down all at the same time. I did this a number of times, each time selecting smaller and smaller groups of curve ends as my task was nearing completion. With all that done, it was time to shrink the base of the branches, because they were too big as well. So, one by one I selected, shrunk (with Alt S,) and smoothed the radius (with W>Smooth Radius.) Whew, done with that. A little more tweaking on each branch tip to size them to an invisible razor point, and onto the next step.

The Twig-Clusters

Now came another truly grueling stage in the production: the making of the twig clusters, or, rather the mesh volumes that would be used to set the parameter for the twig generation in the curves trees.py script (now in all official releases of Blender) I would be using later on.



So I added a cube object, subdivided it smooth three times, and then manually tweaked it with the Proportional Edit Falloff tool, both with Random Falloff to rough up the mesh



and with Root Falloff (or you can use Sphere or Smooth Falloff) to bend or pull large portions of the mesh at once. With this I shaped in the twig clusters - smaller towards the trunk, spraying out larger towards the end of the branch, always going past and enveloping the majority of the curve segment that the mesh belonged to. With manual tweaking I made sure everything was in place, with no meshes intersecting one another.

Then, of course, I ran into a problem: my computer wasn't fast enough. So, guess what, brilliant me, I came up with a solution. And this is what I did: since everything was slowing down with such a high-poly count in the twig cluster collage object I was editing, I took one of the twig cluster meshes and separate the mesh into a new object by hitting P>Selected. Then I could edit the next portion of twig clusters in a separate object, only having to view as many vertices in Edit Mode as were in that object, which greatly sped up my working performance. Inevitably, this happened again, so I repeated this separate object maneuver about three times, as was needed. In the end I had a collection of various twig-cluster objects, which of course I joined to be one mesh with Ctrl .

Using the Tree from Curves Script

Next? Time for the Tree from Curves script, under the Wizards section of the Scripts menu in the Scripts Window. O , so here's how I did this next part. I found that it was going to be super-hardware intensive on my machine. So it was time to switch to someone's more powerful PC.

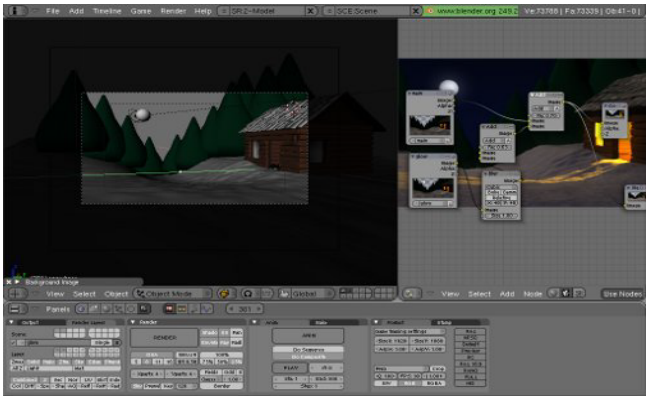
Once I had made this transition to the tougher PC, (and oh, yes, I'm working on Windows P Pro,) I could get onto working on the Tree from Curves script.

By Benjamin Bailey (Banor)

Even though this newer machine I was now on was more powerful, it didn't speed things up all that much. Oh well, so much for that ingenious plan!

Anyhow, this is how you use the script: first you hit Fill Twigs, and set various parameters like Randomize Scale, Shape Strength, Generations, and so forth. Play around with these settings till you get the desired look. You can think of Generations as controlling how many tiers or twigs to generate (for instance, if you had one generation, you'd get straight twigs jutting out of our curve branches. But if you had two generations, you'd get the first, straight twigs, and then more, smaller straight twigs coming out from those first twigs, and so forth as you add more generations. At least that's how I understand it. Then you set the name of the OB Bound, or Object Bound, which would be the name of our twig-clusters object.

I couldn't have very many Fill Twig generations, so I opted for a small amount, like 1 to generations, to speed up performance. And that was about it, since I wasn't going to use their Generate Leaves dialogue for this project. So, with both objects selected (the curve object for the tree trunk and branches and the mesh object for the twig filling,) I hit Generate from selection, and after my computer choked and sputtered and nearly keeled over for a little while, it spit out my new, nice little tree.



The way the script works is it keeps your selected objects and just generates a new mesh object that is your tree. Make sure to move your curve and twig-clusters mesh object to another layer, or the newly generated tree mesh to the scene's primary layer.

Weight Painting

Next, I went into edit mode and carefully selected (with the paint selection tool by hitting the B ey twice,) as many twigs as reasonable and most of their parent branches that they were stemming from, and created a new ertex Group, to which I Assigned my selection to. Then, with that done, I got to the fun part (yeah, right!)

Particles for the Needles

eep in mind that I'm writing most of this article about my project from memory, so bear with my errors and tired brain, please. :) I added a Particle System, set it to type Hair, and went from there. Yes, I know that rhymed. :) Anyhow, you can see my particle settings in the accompanying screenshot. sing some - on the particles, I could simulate the hanging needles. Maybe some Brownian would have done them good. I also made sure to set my newly-created vertex group as the emission area. Oh, and don't forget to hit Emitter under the Render subsection, as well as setting the Material to the right number material (mine being , as I had created another material for the needles with Editing Panel›Link and Materials›Materials›New.

By Benjamin Bailey (Banor)

I used a Blend texture for the needles material, adding a Color Ramp to control the alpha and colors of the needle. I also made sure to set the Map Input as Strand, and tweaked the Strand start and end settings under Shading>Links and Pipeline>Render Pipeline>Strands.

I did some render tests and Color Ramp tweaks on the Blend texture, and I was ready to go.

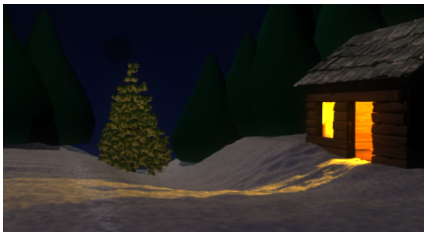
But one issue: since I was now using a very complex tree as my pine tree, I could no longer have 10 pine trees. No, no, no, I now could only have 1 tree. Ouch. That's gotta hurt in the composition area.

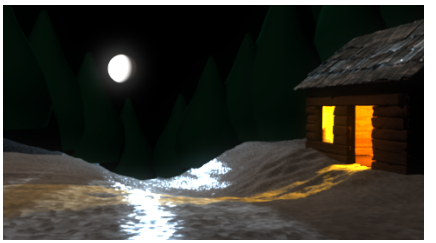
Compositing and Composition

Since the start of the project, right after the blocking stage, I started doing some compositing. First with a basic DoF (Depth of Field) setup, which I soon dropped for lack of need, and then later as I developed the scene, complete with the moon's illuminating glow and so forth.

Early off in the project I was set on making a simple winter scene with a cabin. But as I neared the deadline of the project, I tried a different arrangement with the camera angle, tried a portrait setup with the cabin, but no, no, that didn't work. With only one tree, I was pressed on my objects. The issue with the cabin was simply that the warm, orange glow and the bright, full moon contested with each other - which one would win the viewer's eye? I knew my answer: the moon. And that wasn't my goal. I had a conflicting composition, and that just wasn't going to work.

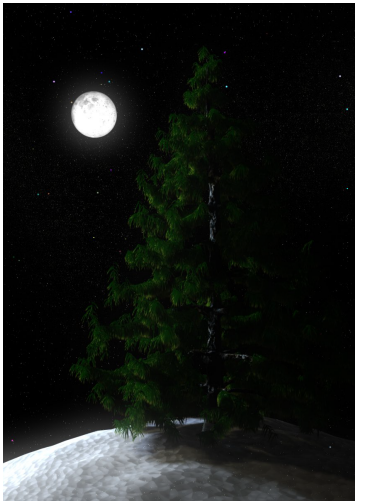
So, after a lot of fidgeting with render tests and tweaks with the cabin composition, I ditched the cabin altogether, for lack of time and inspiration in that area. So now it was just the pine tree, a new snowy hill, and the beautiful moon. I could do this, really! But man, was I down in spirits on how the project was turning out, with such a conflicting composition and time running out on me to complete this making-of. But finally I had a good composition, and I was going to keep with it, or die.





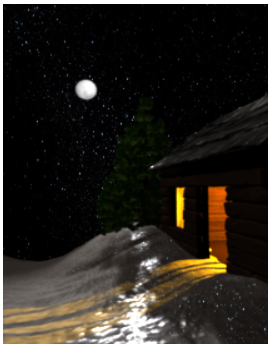
Conclusion

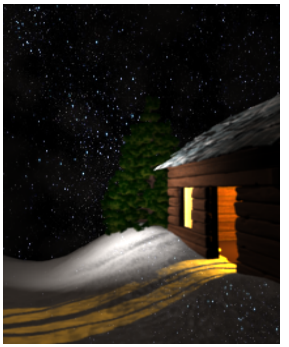
Well, hard punches come to those who ask for it, which is what I did. After a lot more tweaking and renders, I finally came up with the final composition and render you see before you. Yahoo!

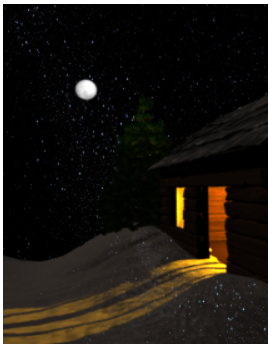


Note about the final work: I do admit that there are some black artifacts on the moon, but since I was not able to fully destroy them from the face of the celestial satellite, they'll have to stay for good

By Benjamin Bailey (Banor)







It took a lot of time, and I'm glad to have this new piece in my portfolio, and to have this great opportunity to share my work with you in the Blender-Art Magazine! But I must say, when Sandra Gilbert first asked me to write an article for the magazine, I wasn't sure if she was really asking me to do an article for the magazine, not just about it, and then I wasn't sure what on earth I was supposed to write about. So, instead of just taking it easy and being interviewed or writing about Christmas shopping habits, I took the initiative and suggested I make a winter scene and then write a making-of article about it. And that's what I did!

Hope you enjoyed my article, and I apologize beforehand for any mistakes or technical errors.

God bless and happy Blending, friends!

Benjamin Bailey

www.benjamindbailey.com/blog

Note about my website: The website is not built yet, but the blog is up and running!

Benjamin Bailey (Banor)

Is an 18-year-old home schooled artist from rural West Virginia, who's current activities include finishing high school studies and starting college at home, writing for BlenderNation.com, working on various small film and open source projects, singing, drawing, writing, chatting with friends, and of course playing around in Blender. You can keep up-to-date with Benjamin's latest endeavors on his personal blog.

Website: www.benjamindbailey.com/blog

Johnny Blender

by David Ward

When I first began using Blender, I found that a great way to learn the software was to follow tutorials that I found here and there on the web. One series in particular that helped me immensely as a beginner (and one that I later directed other beginners to) was the Introduction to Character Animation from the BlenderWiki. While this series was (and still is) an invaluable tool, it's a few years old, and some of the tools and techni ues have changed with the newer versions of Blender. It was from this series that my idea first stemmed I wanted to show users how to create a complete character: from a single polygon to a fully functional marionette that they could animate in any fashion they desired, as well as give it a nice texture, some realistic hair or fur, and maybe a few clothing items.

I began the series towards the beginning of August, and would record four or five episodes per week, basing the instructional material over the general method I used when creating most of my characters. I finished the last episode in the beginning of September, so the total time it took was about a month, give or take a week, as I had a business trip that I went on during that time and was unable to record anything.

Most of the difficulties I encountered had to do with rushing through things, and pressing the wrong hotkeys or sometimes I would forget how to do a certain thing and have to pause the recording while I researched to figure it out. One instance in particular that I can recall was towards the end, when I was going over the cloth modifier. I was unable to get the character to behave as a solid object for the cloth to deflect from, so I had to pause and look it up. After finding the obvious answer, I began recording again and informed my viewers that my problem was the fact that the character and the cloth were on separate layers, and that's why they couldn't uite interact.

While I didn't really learn anything new during the creation of the series, I was happy to see uite a response to my Youtube uploads, and that's when I learned a few more tricks from people suggesting things in the comments. For example, I had no idea that you could Alt S to slim/fatten parts of a mesh I had only used this key combination to resize bones while rigging. Now I find it to be a very useful tool, especially when creating clothing items.

I hadn't really expected to get the response that I've gotten I'm very glad that it's helped people and that they find it to be a useful addition to this great Blender Community. I plan to keep going with whatever assistance I can offer, and at this point, I am planning a second series which will cover a lot of the same things, but this time in greater detail (i.e. multiple clothing items, more advanced rigging techni ues, and tangent normal mapping to give better detail than regular normal and bump maps).

-dw

You can view the ohnny Blender series on Youtube

You can purchase the ohnny Blender dvd at lulu.com (1 .)

Twenty-Eight part series on the complete creation of a character in Blender, from a single polygon to a fully-rigged and textured character. Recorded using Blender . . The tutorials are in WM format, (each part e ualling roughly 0 - 0 minutes) and best viewed with either Windows Media Player, or LC Media Player. Also contains the final .blend file ■

1 - How/when did you get involved with CG Cookie?

I got involved with CG Cookie a little over a year ago. It was one of those chance encounters that just happened to evolve into much more. To be honest I don't even remember how I stumbled on CG Cookie, I believe I was googling for something when I saw it.

I really liked the content CG Cookie had for DS Max and Maya but I was disappointed to see there wasn't any Blender content, at which point I saw the ad that said We pay for tutorials! and so I sat down and wrote up a tutorial for submission. Wes seemed to like the tutorial and asked me to do another one, so I did. It too was well received and from there it was history. I have been doing tutorials for CG Cookie ever since :)

2 - Do you plan out your video tutorials in advance, or do you just sit down and wing it?

Pre-planning all depends on the tutorial. If, for example, I am doing a human head, it is something that I have done so often that I just sit down and start recording. But for something like the Piston Rigging tutorial, http://www.facebook.com/l/ bf www.blendercookie.com/ 00 /0 / 1/rigging-a-piston/ , where there are some more in depth settings to play, with I generally plan it out in advance. I like to be sure I know what I am doing.

However, that being said, a lot of times I do like to just sit down and wing it even if it's something I haven't created before. Tutorials like the Barrel, Pumpkin, and Hand tutorials were all done this way. I find it a bit more enjoyable, assuming I don't royally screw it up while on the spot!

3 - How long does it take you to complete a tutorial from start to finish?

As I very seldom do any post-processing (aside from minor sound corrections), the production time is generally the total length of the tutorial encoding time uploading and posting time.

When I create tutorials I do everything at the same time, everything you see is live. I like to do it this way as I find it to much more cohesive and more interactive for the viewer. It took me a bit of practice to get this down since it can involve a lot of multitasking at times but in the end, I think it gives a better result.

4 - Where do you get your ideas for tutorials?

Now a days most of my tutorial ideas come from user re uests and brainstorming sessions with Wes. Since we are catering to a large number of Blender users, it is very important to try and keep them happy (as much as possible) and so the best way to do this is to produce tutorials based on what they want.

ust a few weeks ago we posted a survey for future education that allowed people to submit any ideas they had and to vote on a few topics I laid out. The entries for this gave us a really good idea on where to focus for the next few months. This kind of thing really helps steer the direction of the site and the tutorials.

However, I also like to do tutorials from time to time for my own pleasure. Tutorials that cover something I WANT to create. It's more fun that way :)

5 - With the launch of BlenderCookie, how has your role changed, what new responsibilities have you taken on?

The launch of Blender Cookie has brought on a slew of new tasks for me. Technically I am the Senior Editor and so I am responsible for communicating with authors, assigning tasks, retrieving content from authors, publishing content,

answering support emails and responding to comments, etc. And then I also produce a large number of the tutorials and graphics for the site. Whereas before, with CG Cookie, I was ONLY producing tutorials. All in all Blender Cookie keeps me on my toes most of the time. It's a full-time job and a half.

6 - CGCookie/BlenderCookie has just announced its Citizen program. Can you tell us a little about it, the benefits and Citizen only resources mentioned in the announcement?

CG Cookie's Citizen program is a membership service that provides unlimited access to all of the tutorial source files (normally purchased for SD) and exclusive tutorials/content.

Exclusive tutorials and content are resources which only Citizens (members) will have access to. These tutorials are more in-depth and advanced than our free tutorials and will cover a wide range of topics. We are also looking to provide a series of content packs to Citizens such as a fully textured game model pack.

The program really has two purposes:

A. To provide more, higher- uality content to the users and to make it cheaper in the long run for those that like to purchase the source files.

B. To bring in more funds for maintaining the site and producing content.

All of the tutorials for Blender Cookie (and CG Cookie) are created on a commission basis. Each of the author's are paid for each and every tutorial they create. The Citizen program helps to bring in more funds, which may then be used for commissioning authors and to continue improving the site.

In the end, our goal is to improve the site and its services with every tutorial we release and every change we make. The Citizen program is one of the ways we can do this :)

7 - What are some of the future plans for CGCookie/BlenderCookie?

We have a lot of ideas floating around that we would like to implement, it's just a matter of time and actually getting to it!

One of the main plans right now, is to create a network of sorts. CG Cookie is the mothership of all our current sites (CG Cookie, Blender Cookie, Mavenseed) and we would like to continue pushing it in that direction. Currently, Blender Cookie is the only site dedicated to just a single software package. CG Cookie hosts all of the Maya, DS Max, and Brush training. We would like to migrate all of this training to its respective site (Max Cookie, Maya Cookie, etc.), leaving CG Cookie as the central hub that all of the content would filter into and that would represent the company as a whole.

However, before the above can happen we have some house cleaning to do. Even though it may not seem obvious, there are a good few problems with the sites that we would like to address. This needs to be done before any new sites are launched. At this moment we are working through the sites and putting together a list of everything that needs changed, features that need added, etc. so that we may launch a version of Blender Cookie and CG Cookie, with all of the needed refinements

8 - How much of your time is taken up with CGCookie/BlenderCookie?

CG Cookie/Blender Cookie is a job and a half. If I had to put a rough estimate on it I would guess that I spend about 0- 0 hours per week on Blender Cookie related tasks.

This includes everything from time taken to prep, produce and publish tutorials, updating the site, responding to emails/support tickets, responding and moderating comments, weekly meetings, brainstorming and just about anything else you can pile on there.

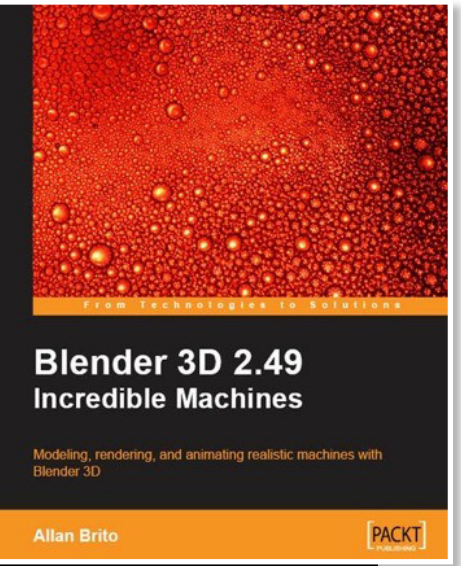
You could almost say I (and Wes) live in Blender Cookie. As Wes put it, it is threaded into our daily lives.

9 - Do you still have time for personal projects? If so, are there any you care to discuss with us?

I only wish I had more time for personal projects... Some how or another, though, I manage to s ueeze in the occasional project. More often than not, in the recent months my personal projects have revolved around my traditional art. I have been working to develop my traditional art/drawing skills in an effort to enhance my D work but also as a means of sanity. Drawing is my way of zoning out and getting a break from the rest of the world.

In the near future I also hope to do a few more of my own Blender projects, primarily focused around character modeling and creating full scenes. We will have to wait and see what the future brings, though, there is only so much time in each day :)

BOOKREVIEW: Incredible Machines by Allan Brito



This time we have a book from Allan Brito, titled 'Blender D . Incredible Machines' published by Packet Publishing.

The book has an unusual approach towards the choice of topics, it starts off with an explanation on incredible machines, uickly moving on to useful bits on pre-production. It contains three modeling tutorial based modules accompanied by their respective sub modules in form of various d techni ues ranging from rendering, particles and animation.

For a book that reads like it's being targeted at novice blender users, it provides surprisingly a much higher level of information at the same time. For example after the first modeling tutorial, it has a chapter for rendering the gun model, rendering it with a raytracer, none other than Yafaray. Now the introduction of Yafaray at this level feels rather odd as the scale of this project doesn t seem to necessitate throwing a novice reader into nitty-gritty s of an external raytracer.

In a later part, the book also throws in Luxrender, a non biased rendering engine. This again goes a little against the central idea of being ready for novice reader. While reading through the book, it gives an impression that it had a lot to offer, which it actually does considering the range of topics, but in a unassumingly confusing manner.

Positives

The book provided good explanations on various modeling problems faced by an novice reader and it does a good job of explaining the proposed concepts in just enough detail needed to impart enough confidence in the reader to replicate the example explained.

The thing that made uni ue is the bold attempt to integrate teaching external rendering engines like Yafaray and Luxrender into the tutorial.

Not so positives

Extremely simplistic choice for models, a simple gun, the steam punk space ship and the odd transforming robot made of d boxes.

The difficulty level is varied initial chapters suggest its nature to be ready for novice to intermediate readers however the choice of selection of topics ranging from external rendering engines and animation begs otherwise.

Endgame

Considering the authors experience in external renders, you feel that an attempt on a separate book for rendering engines such as these would have been far more fruitful, still the entire book have enough material and depth to comes across as a good reading companion for people with beginner to intermediate blender knowledge.

★★★★☆ 4/5

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Snowman - by Dave Collison

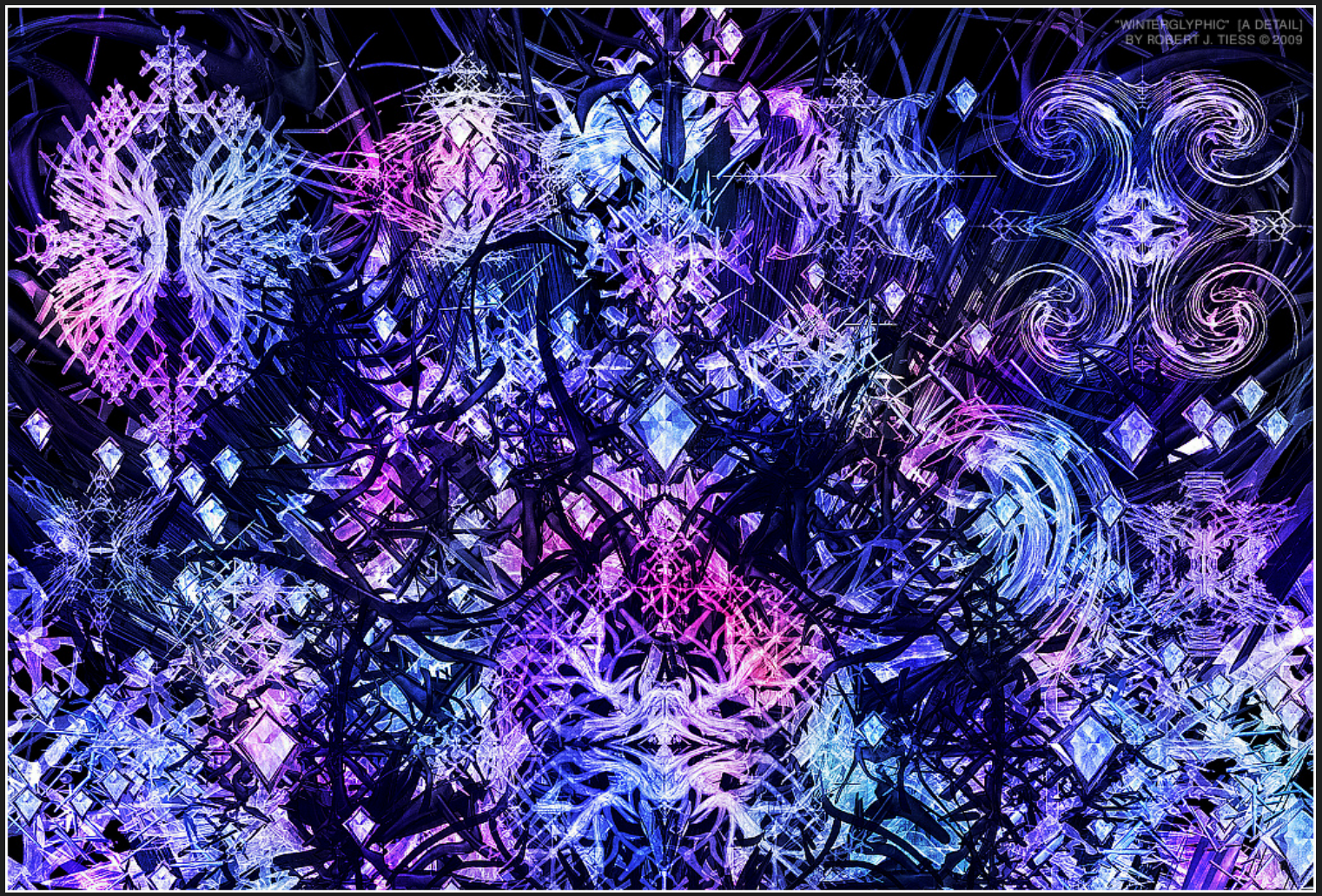
Winter -by WBR Tenchike

Cyclon - by Thomas Kole

Cyclon - by Thomas Kole

Snowman who longed to touch the Sun - by Robert J Tiess

Winter Glyphic -by Robert J Tiess



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- Tutorials explaining new Blender features, 3dconcepts, techniques or articles based on current theme of the magazine.
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- Cartoons related to blender world.

2. Send submissions to sandra@blenderart.org. Send us a notification on what you want to write and we can follow up from there. (Some guidelines you must follow)

- Images are preferred in PNG but good quality JPG can also do. Images should be separate from the text document.
- Make sure that screenshots are clear and readable and the renders should be at least 800px, but not more than 1600px at maximum.
- Sequential naming of images like, image 001.png... etc.
- Text should be in either ODT, DOC, TXT or HTML.
- Archive them using 7zip or RAR or less preferably zip.

3. Please include the following in your email:

- Name: This can be your full name or blenderartist avtar.
- Photograph: As PNG and maximum width of 256Px. (Only if submitting the article for the first time)
- About yourself: Max 25 words .
- Website: (optional)

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Upcoming Issue 'Theme'

Issue 26

"Ready, Set, Play! | Blender and Gaming Content"

- External game engines
- Have written your very own game engine
- Create characters, props, levels for use in established commercial games (ex. world of Warcraft, Doom etc)
- Create characters, props, levels, just for fun with no game in mind

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